

IN THE CLAIMS

1-8 (Canceled)

9. (Currently Amended) A method for detecting methicillin-resistant *Staphylococcus aureus* (MRSA) in a sample, said method comprising the steps of:

(a) preparing a reaction mixture comprising:

a sample;

a first oligonucleotide primer comprising (i) a sequence homologous to a target sequence of an RNA derived from the mecA gene of MRSA and (ii) an RNA polymerase promoter sequence at the 5'-end of the sequence in (i);

a second oligonucleotide primer; ~~wherein either said first oligonucleotide primer or said second oligonucleotide primer comprises an RNA polymerase promoter sequence at the 5'-region;~~

an enzyme or a mixture of enzymes having (i) RNA-dependent DNA polymerase activity, (ii) ribonuclease activity that hydrolyzes RNA of an RNA-DNA hybrid without hydrolyzing single-stranded and double-stranded RNA or DNA, (iii) DNA-dependent DNA polymerase activity, and (iv) DNA-dependent RNA polymerase activity; and

a cleaving oligonucleotide probe ~~if said first oligonucleotide primer comprises the RNA polymerase promoter sequence, wherein said cleaving oligonucleotide probe comprising a~~ sequence complementary to a region overlapping and adjacent to ~~the 5'-end of an~~ target sequence of the RNA derived from the mecA gene of MRSA;

(b) incubating said reaction mixture under conditions that allow the formation of a double-stranded cDNA product from the target sequence of the RNA derived from the mecA

gene of MRSA, and the transcription of an RNA product from the double-stranded cDNA product; and

(c) detecting the RNA product transcribed from the double-stranded cDNA product, wherein:

(1) an oligonucleotide comprising at least 10 contiguous bases of the sequence recited in SEQ ID No:18 is used as the first primer, [[and]] an oligonucleotide comprising at least 10 contiguous bases of the sequence recited in any of SEQ ID NoS:19, 20 [[or]] and 21 is used as the second primer, and an oligonucleotide comprising the sequence recited in SEQ ID No:26 is used as the cleaving oligonucleotide probe, or

(2) an oligonucleotide comprising at least 10 contiguous bases of the sequence recited in SEQ ID No:22 is used as the first primer, [[and]] an oligonucleotide comprising at least 10 contiguous bases of the sequence recited in any of SEQ ID NoS:23 [[or]] and 24 is used as the second primer, and an oligonucleotide comprising the sequence recited in SEQ ID No:27 is used as the cleaving oligonucleotide probe, or

(3) an oligonucleotide comprising at least 10 contiguous bases of the sequence recited in SEQ ID No:25 is used as the first primer and an oligonucleotide comprising at least 10 contiguous bases of the sequence recited in any of SEQ ID NoS:23 [[or]] and 24 is used as the second primer, and an oligonucleotide comprising the sequence recited in SEQ ID No:28 is used as the cleaving oligonucleotide probe.

10. (Previously Presented) The method of Claim 9, wherein said RNA polymerase promoter sequence comprises the nucleotide sequence recited in SEQ ID No: 30.

11. (Canceled)

12. (Previously Presented) The method of Claim 9, wherein the reaction mixture further comprises a detection probe comprising a sequence complementary to a portion of the RNA

product transcribed from the double-stranded cDNA product, and wherein said detection probe is labeled with an intercalator fluorescent dye.

13. (Previously Presented) The method of Claim 12, wherein

(1) said detection probe comprises a sequence of SEQ IDS Nos: 20 or 29, if said first primer includes the RNA polymerase promoter sequence, and

(2) said detection probe comprises a sequence complementary to the sequence recited of SEQ ID No: 20 or 29, if said second primer includes the RNA polymerase promoter sequence.